

## **ATTACHMENT**

### **Remarks**

In the outstanding second Office Action, two new grounds of rejection were made for the pending claims. It is submitted that the claims are allowable over these new grounds of rejection for the following reasons.

In paragraph 3 of the Action, independent claim 9 and dependent claims 10-14 were all rejected under 35 USC § 102 as being anticipated by Aulgur USP 5,036,846 (hereafter “Aulgur”). However, for the following reasons, it is submitted that these claims are allowable over this reference.

According to the Examiner, Aulgur teaches a demand regulator comprising communication means for feeding a tube 16 for connection to an inside of a breathing mask with a pressurized breathing gas from an inlet 68; means 13 for supplying dilution air to the breathing gas; a breath-out valve 70 opening from the tube to atmosphere; a manually actuatable control member 30 having a normal position causing operation without over pressure in the tube above atmosphere and with air dilution, and an emergency position causing the tube to be fed with the breathing gas at an over pressure; and means for preventing feed of over pressure gas to the tube so long as the mask is in storage. The Examiner quotes, as a basis for this assertion, col. 4, lines 45-48 and col. 5, lines 31-45 from Aulgur.

However, upon careful reading, it will be appreciated that these identified portions of Aulgur give no basis for these assertions. Thus, in reality, Aulgur discloses a respirator (10) including a mask assembly (12) connected to a harness assembly (14)

comprising an inflatable strap (20) for placement behind the head (22) of the user (col. 3, lines 34-37). The mask assembly (12) includes an internal regulator (13) which mixes the incoming pressurized gas with atmospheric air for delivery of a breathable mixture to a chamber within the mask assembly (col. 3, lines 18-27).

The respirator (10) of Aulgur also includes a valve assembly and comfort control system (28) which is separate from regulator 13. This comfort control system comprises an inlet passage (68) that is connected to a source of pressurized gas, and an outlet passage (70) that communicates with the fluid conduit within the strap (20) of the harness assembly (14) (col. 4, lines 26-30). The valve assembly and comfort control system (28) include a lever (30) for ready access to the wearer's fingers when the mask assembly (12) is grasped in the manner shown in figure 1 (col. 3, lines 44-49) for donning of the mask assembly. Operation of the valve assembly and comfort control system (28) is disclosed from col. 4, line 45 to col. 6, line 65.

In particular, the paragraphs quoted by the examiner disclose that depression of the lever (30) creates fluid communication between the inlet passage (68) and the outlet passage (70). This occurs as pressurized air admitted through inlet passage (68) travels toward the outlet passage (70), thereby pressurizing the fluid conduit within the strap (20) in order to inflate the latter and cause it to stretch to a position where it may be readily placed over the wearer's head (22) (see figure 1 and col. 4, lines 57-68). Then, once the harness (14) is placed over the wearer's head (20), lever (30) is released (col. 5, lines 19-22). This prevents additional quantities of pressurized oxygen from reaching passage (70) from passage (68), and thereby vents strap (20) through passage (70) to the cabin atmosphere so that the forceful shrinking size (both circumference and diameter) of strap (20) urges the peripheral

seal (18) of the mask assembly (12) into tight sealing contact with nose and mouth regions of the user's head (22) (col. 5, lines 31-45).

Accordingly, Aulgur's teaching is directed to a valve assembly and control system of a harness assembly. The demand regulator, which the examiners mistakes for the valve assembly and control system of the harness assembly, is merely described in passing by Aulgur at col. 3, lines 18-27.

There is thus no basis in Aulgur for suggesting that the features of this valve assembly and control system for a harness, which works upon manual actuation anyway, might be adapted for equipping a demand regulator wherein valve means are actuated by the movement of the flexible diaphragm caused by the breathing effort of the user. In particular, the valve assembly of Aulgur does not have those elements associated with a demand regulator as claimed in claim 9. If there is some question as to what constitutes a "demand regulator" as used in the claims and the specification (and this art), the examiner's attention is directed to any of many prior art documents in this field such as US 3,626,974 in the name of A-T-O Inc. where the definition of a demand regulator is satisfactorily set forth.

In view of all of the above, it is apparent that Aulgur neither discloses or even suggests a demand regulator according to the invention. Therefore, independent claim 9 is neither disclosed nor made obvious by Aulgur so that claim 9 is allowable. For these same reasons, it is submitted that claims 10-14 dependent therefrom are similarly allowable.

In **paragraph 10** of the Action, independent claim 9 and dependent claim 16 were both rejected under 35 USC § 102 as being anticipated by the Bertheau USP 5,690,102 (hereafter "Bertheau"). However, for the following reasons, it is submitted that these claims are allowable over this reference as well.

According to the examiner, Bertheau teaches a demand regulator comprising communication means 27 for feeding a tube 17 for connection to an inside of a breathing mask with a pressurized breathing gas from an inlet; means 16 for supplying dilution air to the breathing gas; a breath-out valve 29 opening from the tube to atmosphere; a manually actuatable member 18 having a) a normal position causing operation without over pressure in the tube above atmosphere and with air dilution, and b) an emergency position causing the tube to be fed with the breathing gas at an over pressure; and means 28 for preventing feed of over pressure gas to the tube so long as the mask is in storage.

A careful reading of Bertheau shows that there is no demand regulator disclosed in this document, but only an inflatable head harness equipped with a valve for controlling air flow to the straps of the harness (a harness element similar to that of Aulgur discussed above). Such a valve does not correspond to the definition of a demand regulator (see above), and there is no clue as to how it might be adapted to a demand regulator.

In view of all of the above, it is also apparent that Bertheau neither discloses or even suggests a demand regulator according to the invention and as specifically claimed in claim 9. Therefore, independent claim 9 is neither disclosed nor made obvious by Bertheau so that claim 9 is allowable. For these same reasons, it is submitted that claim 16 dependent therefrom is similarly allowable.

In paragraph 13, dependent claim 15 was indicated as being allowable if rewritten in independent form. However, in view of all of the above, it is submitted that dependent claim 15 is allowable in dependent form since claim 9 and the remaining dependent claim are allowable.

The remaining references which were cited but not applied have been reviewed but are not believed to be pertinent to the patentability of the present invention.

For all of the foregoing reasons, it is submitted that the present application is in condition for allowance and such action is solicited.